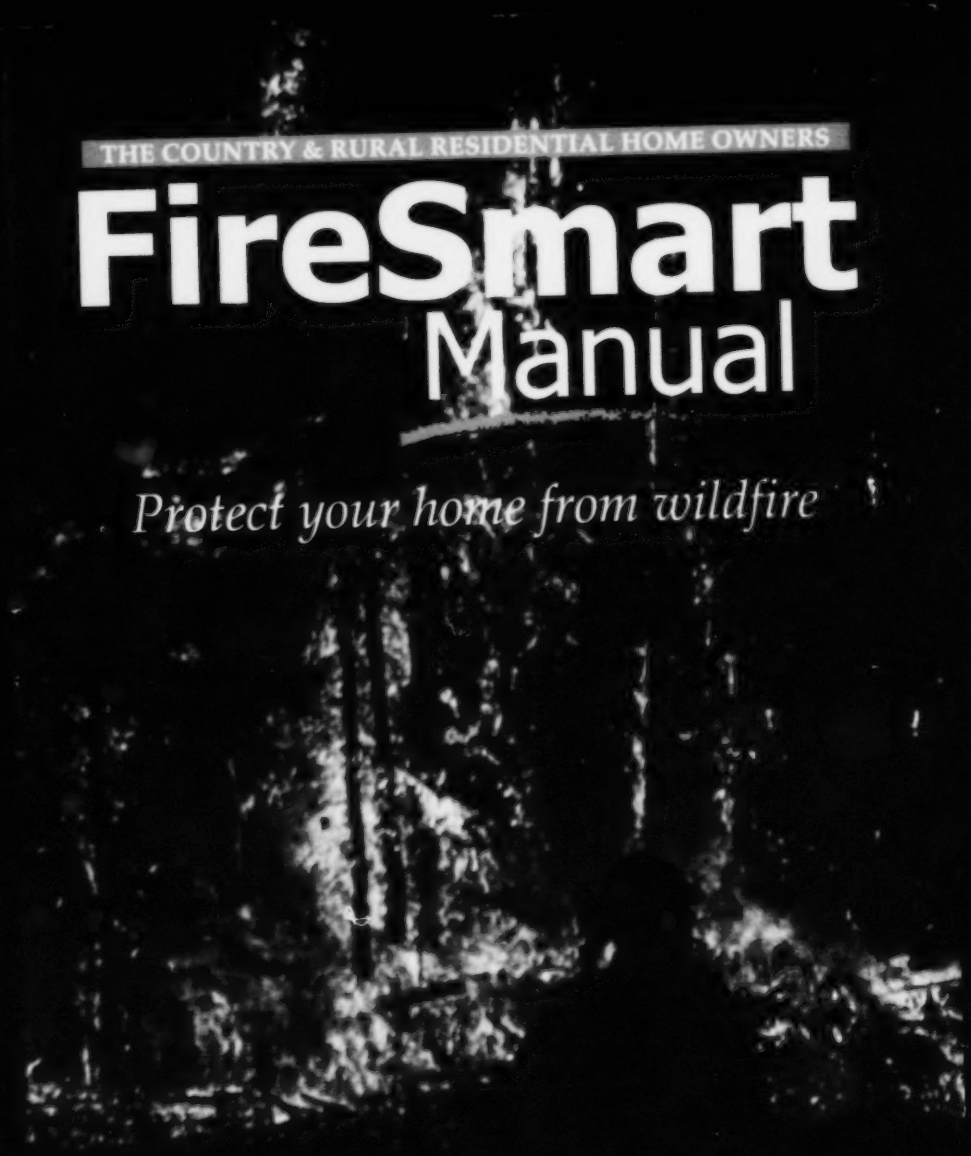
THE COUNTRY & RURAL RESIDENTIAL HOME OWNERS

# FireSmart Manual

*Protect your home from wildfire*



You and your neighbours can reduce the hazards of **Wildfire** by following these simple preventative steps.

Take the **FireSmart Assessment** test!

Is **your** home at risk?

Yukon Government

The Government of Yukon, would like to thank *Partners in Protection* for providing the information used in this brochure. We would also like to thank *Alberta Sustainable Resource Development* for allowing us to use their FireSmart manual as a model for this Yukon publication.

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# The Yukon Reality

Wildfires are capable of spreading at an astonishing rate. Crowning forest fires can spread at up to five kilometres per hour. Grass fires can travel at even greater rates.

In the Yukon, typically 50 per cent of all wildfires are caused by human activity. Wildfire is also a natural phenomenon. Another 50 per cent of Yukon wildfires are caused by lightning strikes. Over the last several centuries, large areas of the Yukon have been burned over repeatedly.

In 2004 alone, more than 280 forest fires consumed about 1.8 million hectares, which represents just over 6% of the vegetated area of the Yukon. Although wildfires are very beneficial for the renewal of Yukon's boreal forest, wildfires can also damage homes and cabins, affect communities, and disrupt economic development and tourism.

If you live in or near a forested area of the Yukon, it is important to reduce the risk posed by wildfires to your home, property, and community.

Following the FireSmart Home Owners Manual can help reduce that risk.

# Get Ready

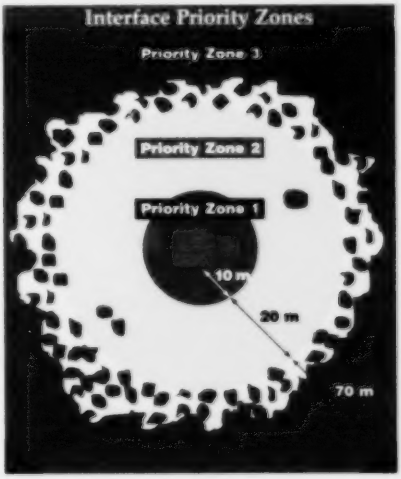
Properly preparing your home and community doesn't guarantee that you will not incur fire damage, but it does reduce the risks. **Make sure your home is insured!** Without it, you will suffer a loss.

Some of these preventative measures cost very little and reduce fire dangers by a great deal; others require planning and a long-term commitment to change.

Let's look at three areas that, if properly managed, may reduce the damage to your property should a wildfire strike.

## Site Preparation

**Any kind of vegetation is combustible.**
Mature trees, shrubs, grass, even your woodpile, are fuels to a wildfire. Their beauty and practicality vanish in an advancing blaze. Managing the space around your house and buildings is of prime importance.



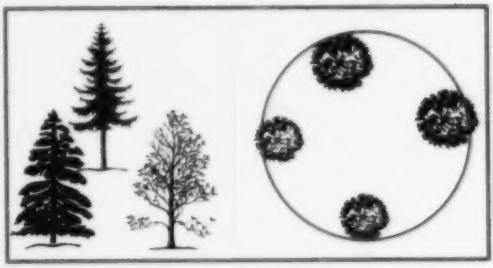

*This diagram shows the Priority Zones surrounding an interface building or group of buildings.*

**Do you have a cleared zone around your house and buildings?**
The first 10 metres of space around your home is your "First Priority". It's the most critical area to consider for fire protection. A good fuel free space gives your fire team a fighting chance to save your home from an advancing fire. A home without a good fuel free space around it can make firefighting difficult, if not impossible.

**What to do?**
Remove any flammable shrubs, trees, deadfall or woodpiles from this area and keep your grass mowed and watered.

**How FireSmart is your "Second Priority" zone?**
From 10 to 30 metres out from your home is the second priority zone. In this zone, you need to reduce and manage potential fuel sources so that combustion cannot be supported.

**What to do?**
Remove trees and debris that would support the crowning of a spreading fire. The crowns of individual trees should be spaced at least 3m apart.



*Low stand density where trees are widely spaced and crowns do not touch or overlap.*

Remove or reduce the number of evergreen trees in the area. Evergreens such as pine and spruce are much more combustible than deciduous trees. In fact, aspen, poplar and birch all have very low flammability rates.

Remove deadfall, thick shrubbery and mature trees that might provide the opportunity for a ground fire to climb up into the forest canopy. Once a fire crowns out, it's virtually unstoppable.

Because fires spread more easily up hill, it's important to extend the second priority zone precautions further on downhill slopes and on windward exposures.

**Can you extend your FireSmart maintenance plan to the "Third Priority" zone?**
The third priority zone begins 30 metres from any structure and extends to a distance of 100 metres and beyond. The idea here is not to remove all combustible fuels from the forest, but to thin the area so fires will be of low intensity and more easily extinguished.

*Lawn or non-combustible material*
*- within 10 metres of building (0 pts).*
*- within 10 - 30 metres of building (0 pts).*

**What to do?**
Thin or reduce shrubs and trees that make up the under story, retain fire resistant deciduous trees, and manage the canopy to reduce the potential for a crowning fire.

**These are...**
simple economical steps anyone can take to create a FireSmart home, community or business site. For these actions to be effective, they must be maintained.

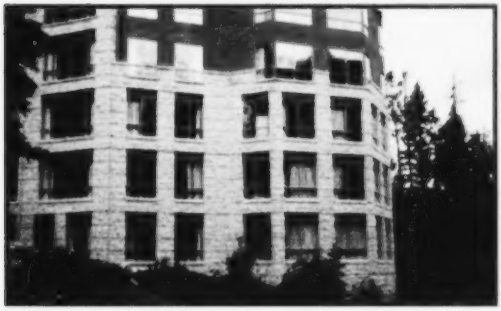
**Home and business construction**
Our second set of precautions deals with the building materials and construction techniques. While it may not be practical or economical to apply all of them to an existing structure, many of these precautions are easily made. Others can be included in long-term maintenance or renovation plans or incorporated in new dwellings as they are designed and constructed.

**Is your roof FireSmart?**
The most fire resistant roofing materials are metal, asphalt, and ULC treated shakes. Untreated wooden shakes and shingles provide no resistance. They are ideal fuels for a roaring wildfire.

Metal, tile, asphalt, ULC rated treated shakes or non-combustible material (0 pts) - *the most fire resistant and remain effective under severe fire exposure.*

Even if your plans for re-roofing are years away, it's still valuable to ensure that your existing roof is free of combustible debris and that no combustible materials such as overhanging trees or vegetation provide fuel for airborne sparks and embers.

Untreated wood shakes (30 pts) - *provide no fire protection.*



Non-combustible siding (0 pts)
*Materials such as stucco, metal siding, brick cement shingles, concrete block, poured concrete, and rock offer superior fire resistance.*

**Are your exterior walls FireSmart?**
Materials such as stucco, metal, brick and concrete offer superior fire resistance to wildfire. Logs and heavy timbers are a little less effective, and wood and vinyl siding offer very little protection.

**Is your home free of fire accumulators?**
If you are designing your home, it's wise to reduce areas that offer protection or hiding places for airborne sparks and embers.

Closed-in eaves and screened soffits are better than those left open or unscreened. Decks and balconies that are not closed in and screened also pose potential hazards.

Fire suppression crews call all these open recesses fire accumulators. These areas increase the vulnerability of a structure to wildfire.

Closed eaves, soffit screened with 3 millimetre (1/8 inch) mesh and accessible (0 pts)

Closed eaves, soffit not screened with 3 millimetre mesh (3 pts)

Open eaves, soffit not screened (6 pts)

**Are your doors and windows FireSmart?**
Tempered glass has good resistance to damage by fire. Double or thermal pane window construction provides moderate protection, but single pane glass provides virtually no protection.

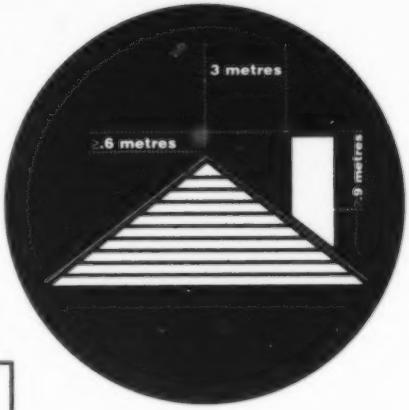
Single pane (3 or 4 pts)

Tempered (0 pts) - *optimum protection is provided by tempered glass.*

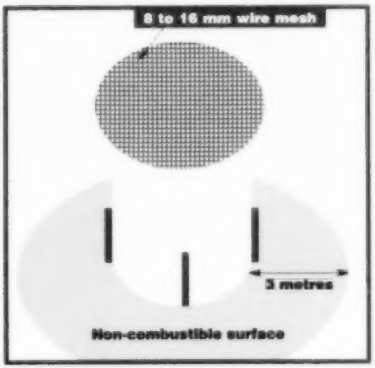
Double pane (1 or 2 pts) - *moderate protection is provided by double or thermal pane windows.*

# Don't Be the Cause of a Wildfire

This set of objectives is aimed at not becoming the source of the fire.




**FireSmart your chimney**
Chimneys should be constructed to meet current Yukon building code requirements and should be screened-in with the appropriate approved spark arrestors.




**Burn barrels and ash pits**
Burn barrels should be well away from buildings and other combustible sources. Burn barrels should have proper ventilation, screens, be staked down and wired to metal surface, and should never be left burning unattended. For safer disposal, bring your debris to a landfill site.

**Power lines and propane tanks**
Vegetation should be cleared well back from power lines, propane tanks and other fuel supplies.

**Emergency facilities**
FireSmart building sites have adequate emergency vehicle access, and a readily available water supply such as a pond or dugout nearby.

*Contact utility companies for clearing of vegetation under overhead electrical installations.*

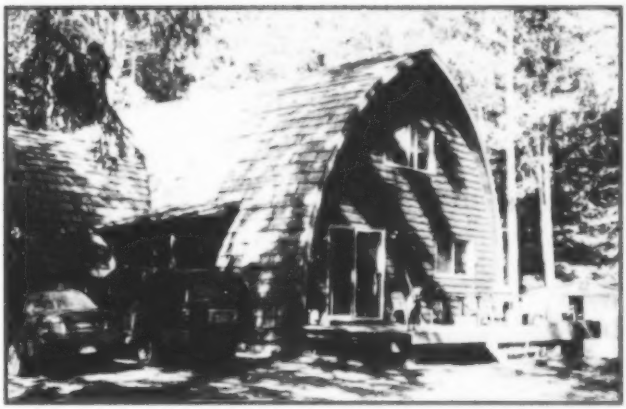
**Shovels and rakes**
Every home should have shovels, rakes, axes, garden hoses, sprinklers and roof ladders to assist in suppressing wildfires and in structure protection.

# A Well Thought Out FireSmart Protection Plan

**A** Prune tree branches to a height of 2 metres
**B** Store fire wood at least 10m from the house
**C** Remove flammable trees within 10 metres of house
**D** Trees separated with at least 3m crown spacing
**E** Branches are clear of power lines (if possible bury power service)
**F** Remove brush, mow and water lawn
**G** Your name and lot number clearly visible for quick identification
**H** Driveway is wide enough to accommodate emergency vehicles
**I** Provide additional emergency exit
**J** Pond or cistern with emergency water supply
**K** A FireSmart ash pit or burning barrel
**L** Driveway clear of trees to a distance of at least 3 or 4 metres
**M** Chimney installed to code complete with spark arrestor screens
**N** All soffit vents and gutters should be screened
**O** Porches and balconies screened, crawl spaces enclosed
**P** Position propane tank at least 10m away from the home with the valve pointing away from house
**Q** Fire resistant exterior roof and walls
**R** Protective drapes and or shutters on windows to protect interior from radiant heat

# Do Your Own Home and Site Hazard Assessment

Assign yourself the indicated number of points for each assessment area. The fewer points you get, the more prepared your property is to successfully survive a wildfire. If a question does not apply to your home, score 0.



*Will your home survive a wildfire?*

# Home & Site Hazard Assessment

| Important Factors | Characteristics of Material | Point Rating | Your Score |
|---|---|---|---|
| **What kind of roofing material do you have?** | If you have asphalt, metal, tile, ULC rated shakes | 0 | |
| | If you have unrated wood shakes | 30 | |
| **How clean is your roof?** | No needles, leaves or other combustible materials | 0 | |
| | A scattering of needles and leaves | 2 | |
| | Clogged gutters and extensive leaf litter | 3 | |
| **What is the exterior of your home built of?** | Non-combustible material stucco, metal siding or brick | 0 | |
| | Logs or heavy timbers | 1 | |
| | Wood, vinyl siding or wood shakes | 6 | |
| **Are your eaves and vents closed-up and screened?** | Closed eaves and vents with 3 mm of wire mesh | 0 | |
| | Closed eaves and vents with no mesh | 1 | |
| | Open eaves and vents | 6 | |
| **Have you screened-in your balcony, deck or porch?** | All decks, balconies and porches are screened or sheathed with fire resistant materials / No deck | 0 | |
| | All decks, balconies and porches are screened or sheathed with combustible materials | 2 | |
| | Decks, balconies and porches are not screened or sheathed | 6 | |
| **How fire resistant are your windows and doors?** | Tempered glass in all doors/windows | 0 | |
| | Double pane glass | 2 | |
| | Single pane glass | 4 | |
| **Where is your woodpile located?** | More than 10 metres from any building / No wood pile | 0 | |
| | Less than 10 metres from any building | 6 | |

**Low <21 points  Moderate 21-29 points  High 30-35 points  Extreme >35 points**

# Home & Site Hazard Assessment

| Important Factors | Potential Hazards | Point Rating | Your Score |
|---|---|---|---|
| **Is your home set back from the edge of a slope?** | Building is located on the bottom or lower portion of a hill. | 0 | |
| | Building located on the mid to upper portion or crest of a hill | 6 | |
| **What type of forest surrounds your home, and how far away is it?** | Deciduous trees (poplar, birch) within 10 metres of buildings | 0 | |
| | Deciduous trees 10-30 metres from buildings | 0 | |
| | Mixed wood (poplar, birch, spruce or pine) within 10 metres of buildings | 30 | |
| | Mixed Wood (deciduous / coniferous) within 10 - 30m of structure | 10 | |
| | Conifers (spruce, pine or fir) within 10 metres of buildings<br>• Separated<br>• Continuous | <br>30<br>30 | |
| | Conifers (spruce, pine or fir) within 10 - 30 metres of buildings<br>• Separated<br>• Continuous | <br>10<br>30 | |
| **What kind of vegetation grows in the zone around your buildings?** | Well watered lawn or non-combustible landscaping material 10 - 30m | 0 | |
| | Uncut wild grass or shrubs<br>• Within 10 metres of buildings<br>• Within 10 - 30 metres of buildings | <br>30<br>5 | |
| | Dead and down woody material within 10 metres of building<br>• scattered<br>• abundant | <br>30<br>30 | |
| | Within 10-30 metres of building<br>• scattered<br>• abundant | <br>5<br>30 | |
| **Are there abundant underbrush and ladder fuels in the surrounding forest?** | None within 10 -30 metres | 0 | |
| | Scattered<br>• within 10- 30 metres of building | 5 | |
| | Abundant<br>• within 10 - 30 metres of building | 10 | |
| **The Wildfire Hazard Level for your home is:** | | **Total Score** | |

**Low <21 points  Moderate 21-29 points  High 30-35 points  Extreme >35 points**

# Area Hazard Assessment

| Important Factors | Potential Hazards | Point Rating | Your Score |
|---|---|---|---|
| **Forest cover** | Deciduous | 0 | |
| | Mixed Wood | 15 | |
| | Coniferous separated | 15 | |
| | Coniferous continuous | 30 | |
| **Surface cover** | Lawn or non-combustible | 0 | |
| | Wild grass / shrubs | 5 | |
| | Dead & downed scattered | 30 | |
| | Dead & downed abundant | 30 | |
| **Ladder fuels** | Absent | 0 | |
| | Scattered | 5 | |
| | Continuous | 10 | |
| **Slope** | 0-10% | 0 | |
| | 10-25%<br>• even<br>• gullied | <br>4<br>5 | |
| | >25%<br>• even<br>• gullied | <br>8<br>10 | |
| **Position on Slope** | Valley bottom or lower slope | 0 | |
| | Mid-slope | 3 | |
| | Upper-slope | 5 | |
| **The Wildfire Area Hazard for your property is:** | | **Total Score** | |

**Low <21 points  Moderate 21-29 points  High 30-35 points  Extreme >35 points**

# Other FireSmart Considerations

| Important Factors | Yes | No |
|---|---|---|
| Do you have adequate insurance on your home and property? | | |
| Do you have the necessary fire suppression equipment (shovels, rakes, buckets, hoses, etc.) easily accessible? | | |
| Are your burn barrels screened and at least 10 metres from combustibles and buildings? | | |
| Are overhead power lines clear of vegetation and at least a tree's length away from nearby forest? | | |
| Are propane tanks clear of vegetation (at least 3m clearance) and at least 10 metres away from your home and other buildings with the vent facing away from the structure? | | |
| Are emergency fire services within a 10 minute drive from your home? | | |
| Is your chimney safe?<br>Is your chimney clean?<br>Does it have proper clearances and stack heights with proper screens and firek arresters? | | |
| Do you have good emergency access to your property? | | |
| Does your home and other buildings have a clear defensible zone of at least 10 metres on all sides of the structures? | | |
| Do you have an adequate municipal or on-site water supply in case of fire? | | |
| Does your family have an emergency fire plan? | | |

## Emergency Phone Numbers

Find and copy down the emergency numbers for your area and keep them in a visible area close to your telephone.

Fire Department: _____

Police: _____

**To report a fire call the toll-free wildfire reporting line at**

1-888-798-FIRE (3473)

**Property Identification:**
Town_____

Lot _____
Or
Street Address _____

For more information about protecting your home and community from wildfire, order a copy of "FireSmart, Protecting Your Community from Wildfire". Copies available from Partners in Protection, phone (780) 435-7283 or http://www.partnersinprotection.ab.ca/downloads/index.shtml or you can obtain copies from your local Yukon Wildland Fire Management office, or the Yukon's FireSmart Program. Call (867) 667-3013 or toll free in Yukon 1-800-661-0408, ext. 3013.

For more information on fire prevention, detection and suppression in the Yukon, please visit:
www.gov.yk.ca/depts/community/firemanagement/index.html

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Call **667-3013**
or toll free in Yukon
**1-800-661-0408** ext.3013
for more information.

Yukon
Community Services